

**INSTITUTE OF PUBLIC HEALTH
COLLEGE OF MEDICINE AND HEALTH SCIENCE
UNIVERSITY OF GONDAR**



**PREVALENCE OF DEPRESSION AND ASSOCIATED
FACTORS AMONG URBAN CIVIL SERVANTS, IN HARAR,
EASTERN ETHIOPIA**

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LIST OF ACRONYMS

BDI	Beck Depression Inventory
CIDI	Composite International Diagnostic Interview
CVD	Cardio Vascular Disease
DCS	Demand-Control- Support
DSM	Diagnostic and Statistical Manual of Mental Disorders
ERI	Effort Reward Imbalance
HTT	Hydroxytryptamine
ILO	International Labor Organization
MDD	Major Depressive Disorder
NIMH	National Institute of Mental Health
PHQ	Patient Health Questionnaire
SADDAG	South Africa Depression and Anxiety Group
SPSS	Statistical Package for Social Science
UoG	University of Gonder
WHO	World Health Organization

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Abstract

Back ground: Most of the times, the pressure and the stress at work coupled with other life's problems can make depression more likely to occur. Depressions pose a major public health problem from affecting quality of life up to suicide. Unfortunately in Ethiopia, there is little epidemiological research work on the prevalence of depression at work place and factors among civil servants.

Objective: The aim of this study is to assess the prevalence of depression and associated factors among urban civil servant in Harari regional state, Ethiopia.

Methodology: Institution based cross-sectional study was undertaken from March to April 2014 in Harari regional state. Stratification was done based on international standard classification by occupation 2010. The study was conducted among 424 urban civil servants. Using patient health questionnaire (PHQ-9), cases of depressive symptoms were identified according to the diagnostic statistical manual of mental disorder criteria. Data was collected using structured self-administered questionnaire. The association between dependent and independent variables was done by binary logistic regressions and backward stepwise method was employed.

Result: -A total of 401 study participants were interviewed, giving a response rate of 95%. Sixty-six adults identified with symptoms depression in the last 2 weeks with over all prevalence of 16.5% (95% CI 13.2%–19.7%). After full adjustment for possible confounders the covariates marital status for sep/div/wid (AOR 3.31(1.20-9.13)), low work control (AOR=7.07 (95% CI 3.49-14.30), low job security (AOR=2.66 (95% CI 1.21-5.84) and job dissatisfaction (AOR=3.55 (95% CI 1.85-6.80) were found to be significantly associated with depression.

Conclusion and recommendation: - The prevalence of depression was found to be high. Low control, low job security and job dissatisfaction were found to be significantly associated factors with depressive symptomatology. The psychosocial work environment is a better predictor of depressive symptoms than organizational factor. Therefore, improving psychosocial work environment is essential.

1. Introduction

1.1 Statement of the problem

In recent times, the pressure of daily living, especially in an environment of urban and economic gloom is likely to be a precursor to depression among workers. Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration and found in general community and in work place. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities and impaired quality of life (1, 2, 3).

The etiology of depression is multi-factorial and complex. It involves the interaction of life events, like financial difficulties, certain medication like beta blocker, Non-psychiatric illnesses like neurological condition and problem and Psychiatric syndromes (4).

Depression has become so common that it has been referred to as the common cold of mental illness and has become the world's number one public health problem(5).At its worst, depression can lead to suicide. Almost 1 million lives are lost yearly due to suicide, which translates to 3000 suicide deaths every day (6).

The World Health Organization (WHO) and the International Labour Organization (ILO) have both recognized that mental health problems are among the most important contributing factors to disease and disability in the workplace worldwide. Estimates in the United States of America (USA) show that 10 percent of workers will develop an episode of depression serious enough to require time off from work. 25 percent of workers in the United Kingdom (UK) have psychological disorders of which the most common is depression. In the European Union (EU), 20 percent of the adult working population suffers from a psychological disorder, most common also being depression (5).

Epidemiological studies and data on prevalence rates of major depressive disorders in Africa are limited and much less in workplace. However there are some urban based community studies in South Africa and Zimbabwe. Study conducted in the Western Cape and was found that depression in an urban

setting, between 25.2 per cent and 34.7 per cent and in Zimbabwe was 30.8%. (5, 6, 7)

In Ethiopia, mental disorder is the leading non-communicable disorder in terms of burden. But there is few study which can show depression on work place. However, some Studies conducted on depression among those, to describe the outcome of major depression and national health survey showed that the prevalence of depression was 26 and 9.1 percent respectively (8, 9).

Depression symptoms appearing in the workplace may include less productivity, a decrease in interest and difficulty making decisions and substantial impact on an individual's quality of life according to the Canadian Mental Health Association (10). According to the National Institutes of Mental Health, depression costs an estimated \$23 billion in lost workdays every year (11).

Work is generally good for our mental health, but there are times when certain experiences can make work un-enjoyable. Most times, the pressure of, and the stress at work coupled with other life's problems can make depression more likely to occur. Certain jobs are more likely to make people unhappy in their workplace and Jobs in which an employee cannot use his or her skills, or which are repetitive and are the same every day. Seem particularly likely to make people fed up with their work. (1)

However, in Ethiopia, there is little epidemiological research work on the prevalence of depression at work place and factors among civil servants. Therefore this study focus on prevalence and factors associated with depression among urban civil servants

1.2 Literature review

Everyone feels “blue” or sad from time to time. It is a normal life experience. But when these emotions increase in intensity, persist for more than a few weeks, and start to interfere with a person’s life especially in a workplace, it may be signal of depression (1).

Depression is among the most debilitating health problems worldwide. Depression is expected to be the second most common disease by 2020 and to account for 15% of the disease burden in the world. The ability to identify major depression in the workplace is compromised by a number of issues. Specifically, concerns about confidentiality cause some people to avoid screening for depression, leading to sample bias (12).

1.2.1 Magnitude of depression

Lifetime prevalence rates range from approximately with most countries falling somewhere between 5 to 20 percent. The World Health Organization reports that the point prevalence for unipolar depression is 3.2 percent for women and 1.9 percent for men, with a 12-month prevalence of 9.5 percent for women and 5.8 percent for men (13). The lack of standard diagnostic screening criteria makes it difficult to compare depression rates cross-nationally (14).

According to the World Health Organization and the National Institute of Mental Health the (WHO; NIMH) approximately 16.2% of Americans had Major Depressive Disorder (MDD) in their lifetime while 6.6% of the population has had MDD in the past 12 months .Within the working population, approximately 6.4% of Americans had MDD. Other Surveys made by National Survey of Midlife Development in the United States and National Co morbidity survey estimate that 1.8 to 3.6 percent of workers in the U.S. labour force suffer from major depression (12). In Japan workers, MDD was estimated to have an annual prevalence from 2.2% - 7.0% and workers were reported to meet the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria for major depressive episode (15). Study conducted among Nepal civil servants shows that the prevalence of depression was 25.5% (16). The prevalence of depressive

symptoms in occupational setting and among economically active group was reported to be no more than 15% (17).

The magnitude of mental illness in sub-Saharan Africa has been reported to be higher than that in Western societies (18). According to Meryl Da Costa of the South African Depression and Anxiety Group (SADAG), 25% of all South Africans suffer from common mental health problems, such as depression. That means one in every four of your employees or colleagues could be struggling with depression (19). The study conducted among South African doctor shows that the prevalence of depressive symptoms was 27 % (20).

A research carried out in Nigeria on civil servant reveals there is significant difference in the prevalence of depression among Civil servants on the basis of marital status and based on gender (1).

When it comes to our country Ethiopia, to the best of the researchers' knowledge there is a no research work on prevalence of depression at work place and causes among civil servants. However, there are few studies and showed that 12 month's prevalence of depression to be 4.8% (21) among women. In addition, the life time prevalence of depression in general population was reported to be 2.2% (22) and the national health survey shows 9.1%, Participants were interviewed using the Composite International Diagnostic Interview(9).

1.2.2 Factors associated with depression

The biopsychosocial model proposes that biological, psychological, and social factors all play a role in causing depression

1.2.2.1 Genetic factor

Genetic factor such as the serotonin transporter (5-HTT) gene affects the chances that people who have dealt with very stressful life events will go on to experience depression. To be specific, depression may follow such events, but seems more likely to appear in people with one or two short alleles of the 5-HTT gene. In addition, a Swedish study estimated the heritability of depression—the degree to which individual differences in occurrence are associated with genetic differences—to be around 40% for women and 30% for men (23).

1.2.2.2 Organic factor

Certain medications are known to cause depressed mood in a significant number of patients. These include hepatitis C drug therapy and some drugs used to treat high blood pressure, such as beta-blockers (24).

Depression are associated with neurological and physiological problems particularly that chronic diseases. Organic diseases like Addison's disease, multiple sclerosis, sleep apneas and chronic illness such as diabetes, cancer and early symptoms of hypothyroidism are associated with depressed mood (24).

1.2.2.3 Demographic and psycho-social factors

Demographic, Social and psychological factors include occupational stressor, like lack of control over work, poor work place relations, job insecurity, noise, social class difference, work load , role ambiguity ,work pressure, lack of autonomy, poor support, low task–role clarity, high job demands, problems with supervisor relationships, poor staffing resources, career dissatisfaction, conflict in relationships, Specific stressful events in the workplace like negative work relationships or interpersonal conflicts and sexual harassment ,bullying (especially by supervisors), high occupational status, Low income, poor educational achievement and overcrowding, number of children, bereavement (of a child, sibling, husband or parent), social stressors, such as a severe marital dispute, poor remunerations and unsuitable work, consumption of alcohol, food insecurity were predicted depression(25-31)

Study carried out in Korea reveals that disrupted marriage (widowed/divorced/separated) and female gender proved to be statistically significant predictors of severe, definite symptoms of depression (25, 26). And also a research carried out in Nigeria on civil servant reveals that depression significant positive association based on gender and inversely associated with marital status(1).

There is a large bulk of evidence from industrialized countries demonstrating an association between occupational stressor and risk of depression. These evidences showed that depression and occupational stressor interact in negative way. This interaction increase risk of depression among workers who work in

stressor. Workers who work in high demand, low control and low support have high probability of developing depression (25- 29).

Workplace and general life event stressors like negative work relationships or interpersonal conflicts and sexual harassment, bullying (especially by supervisors), loss of a loved one and natural disasters negatively associated with depression. A research carried out in industrialized and in developing countries shows this relationship and more prevalent in healthcare sector, in public administration and defense. In the transport, communication, hotel and restaurant sectors and in education, the risk is found to be higher than the average (7, 27, 31).

Food insecurity, low income, poor educational achievement, overcrowding and number of children was seen as risk factor for depression. Evidence from cross-sectional surveys in the USA and Canada show that food insecurity is strongly associated with major depression (31). A research carried out in Zimbabwe Low income, poor educational achievement, and overcrowding (but not overall housing quality) were all associated with caseness of depression and/or anxiety (7).

Study conducted in Nigeria revealed that job demand and poor remunerations unsuitable work condition are the major causes of depression among civil servants as reported by 38%, 35%, 27% of the subjects respectively (1).

1.2.2.4 Behavioral factors

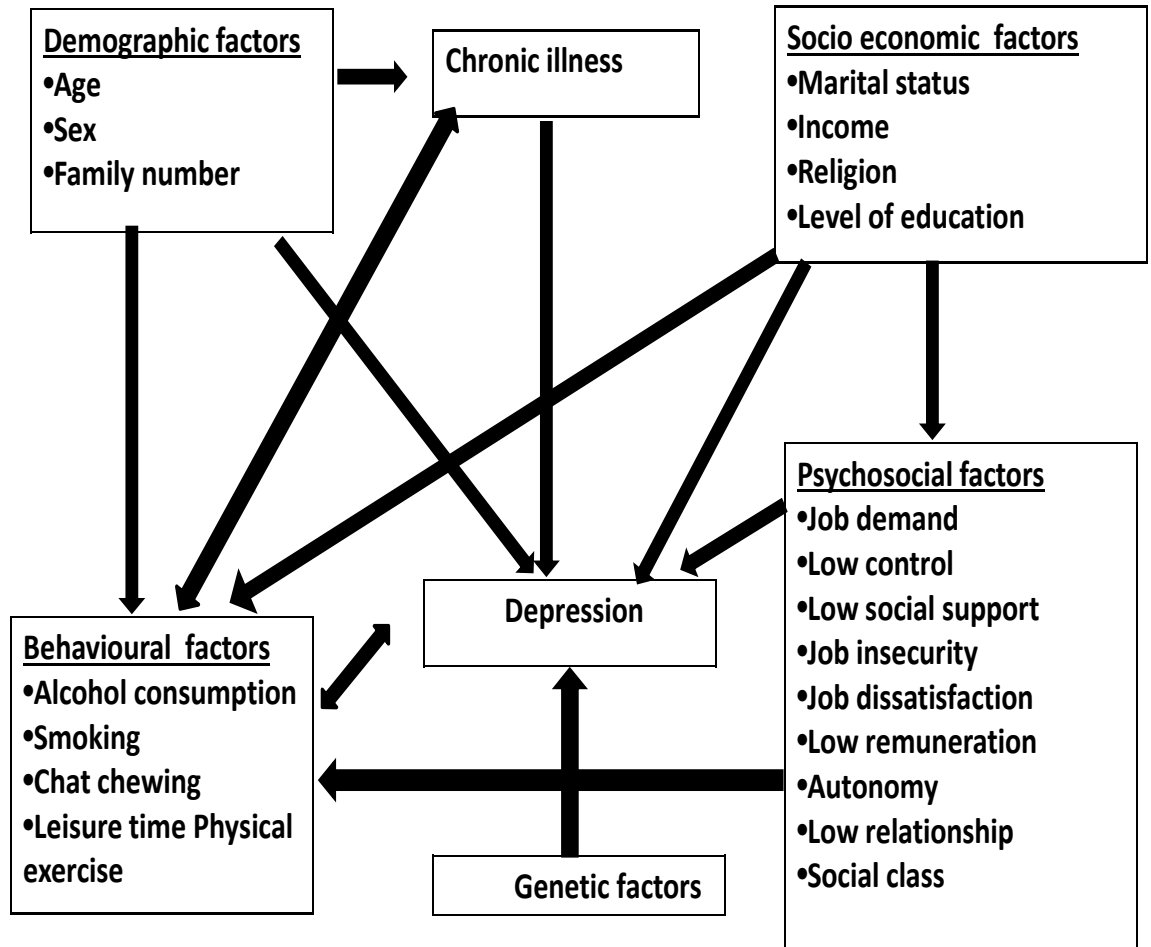
The consumption of alcohol can affect mental health via three mechanisms. First, the use of alcohol may lead to abuse or dependence, mental health problems associated with significant disability in their own right. Second, alcohol use and particularly misuse may also cause or exacerbate other mental disorders such as depression. Third, the contribution of alcohol to interpersonal violence, road traffic incidents and increased levels of risky sexual behavior indirectly impacts on mental health through exposure to trauma and disruptions of family systems (31).

Study showed that Alcohol in large quantities has mood depressant effects and may worsen depressed mood if it is part of a Major Depressive Episode or a transient state in response to a stressor (32).

A research conducted in turkey among university student show that who dance and do exercises associated with less alcohol consumption and depression level (33).

A study in Ethiopia showed that depression was significantly associated with male gender, older age and experiencing of any gender based violence, number of diagnosed chronic non communicable diseases and alcohol consumption (8, 9, 34). The investigation in Ethiopia is restricted to socio demographic factors and life event but population with risk of psychosocial hazards may experience high prevalence of depression. Therefore, this study will provide additional information on the risk habits that are associated with depression.

1.2.3 Conceptual Framework



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Fig. 1:- conceptual framework on prevalence of depression and associated factors in Harar, eastern Ethiopia.

1.3 Justification of the study

In view of the growing psychosocial risk due to rapid globalization in this country but its health consequences have not given great concern especially for civil servant. So that findings of this study will be immense benefits to, administrators, and the governments. Specifically, it will help them to set out plans on how to prevent the depression at work place especially on the civil servants.

In view of the rising substance usage in this country among working age especially in eastern part so that finding of this study will provide enormous evidence. And also, the Ethiopian government formulated mental health strategic plan from 2012/13-2015/2016 (35). More epidemiological data are necessary to assist policy makers on formulating and reform mental health strategic plan.

Work and family are the two domains from which most adults derive satisfaction in life; equally they are the common sources of stressful experiences (27). So that this finding will give input to improve employment and working conditions on national and local levels in order to reduce the negative health effects of the environment in which people work, and will devise and implement policies to ensure the health and safety of workers.

Therefore this institution based study will be aimed at the identification of factors associated with work related depression.

2. Objective

2.1 General objective

To assess the prevalence of depression and its associated factors among urban civil servant, Harar, eastern Ethiopia

2.2 Specific objectives

To determine the prevalence of depression

To identify factors associated with depression among urban civil servants

3. Methods

3.1 Study design and period

Institution based cross sectional study was used. Study period was from February to April 2014.

3.2 Study area

Geographically, Harari regional state is located in the eastern part of Ethiopia. The total geographical area of the region is about 343.21 km. It is geographically located between 42.0342.16 north of latitude and 9.110-9.240 last of longitude. The region shares common boundaries with Easter zone of Oromia woredas, Jarsso woreda in the north and Babile woreda in the east; Fedis woreda in the south and Haramaya woreda in the west and Harar is the administrative city of Harari regional state and administratively; Harari people's regional state is divided in six urban and three rural administrative woredas (main kebeles). These administrative kebeles are further divided into 19 sub-kebeles (urban) and 17 sub-kebeles (in rural). The region is mainly categorized mainly in two agro-ecological zones. 90% of the region is estimated to be mid-high land (weyna dega), between 1400 – 2200 meter above sea level, while the remaining 10% is kola (approximately found below 1500 meter above sea level). The settlement pattern of the region is different from other regions of the country where 62% of the population reside in urban area.

Under the regional civil service bureau, there are 18 governmental sectors. A total of 4151 worker among this 46.7% of them are females and the rest are male. 30% of them have first degree.

3.3 Source and Study population

All civil servants working in Harari regional state were form the source population of this study and study population was civil servants working in Harar public institution

3.4 Inclusion and exclusion criteria

Inclusion criteria

All civil servants who are working in urban public institutions for or more than 6 months were included.

Exclusion criteria

All civil servants included except for those who was cannot read and write.

3.5. Sample size determination

In this study, sample size is determined using single population proportion formula. This study assumes 50% prevalence to obtain the maximum sample size at 95 % certainty and a maximum discrepancy of + (-) 5% between the sample and the underlying population. Thus a minimum number of 385 adults will be the required number in the study. The formula to determine the sample size is below.

$$n = (z / 2)^2 p (1-p) / d^2 = 385$$

For possible none response during the survey the final sample size is increase by 10% to $n = 385 + 10\%$ which is $48 = 424$

This sample size 424 was sample size of the study.

Sample size for associated factors

Variables	Assumption	Sample size
Job demand	OR = 2, P= 38%.Ratio 1:1, Power=80%, CI =95%	288
Low remuneration	OR = 2, P= 35%, Ratio 1:1, Power=80%, CI=95%	292

Since sample size for single population proportion (424) is larger than sample for Associated factors (318, 288 or 292), this sample size (424) will be sample size of the study.

3.6 Sampling procedure

The stratification was done based on international standard classification occupation [ISCO 2010] thereby yielding three categories based on the Erikson–Goldthorpe–Portocarrero scheme of structural classes as “professionals and, managerial positions”, including professionals (higher level) or other high-ranked employees (e.g., managers); “routine non-manual work”, which had a large proportion of administrative staff and technical; and, “manual workers”, encompassing data clerk personnel, janitors, security personnel, drivers, or other similar jobs. After the stratification the occupations of civil servants was select by simple random sampling from the list available at their specific public institution.

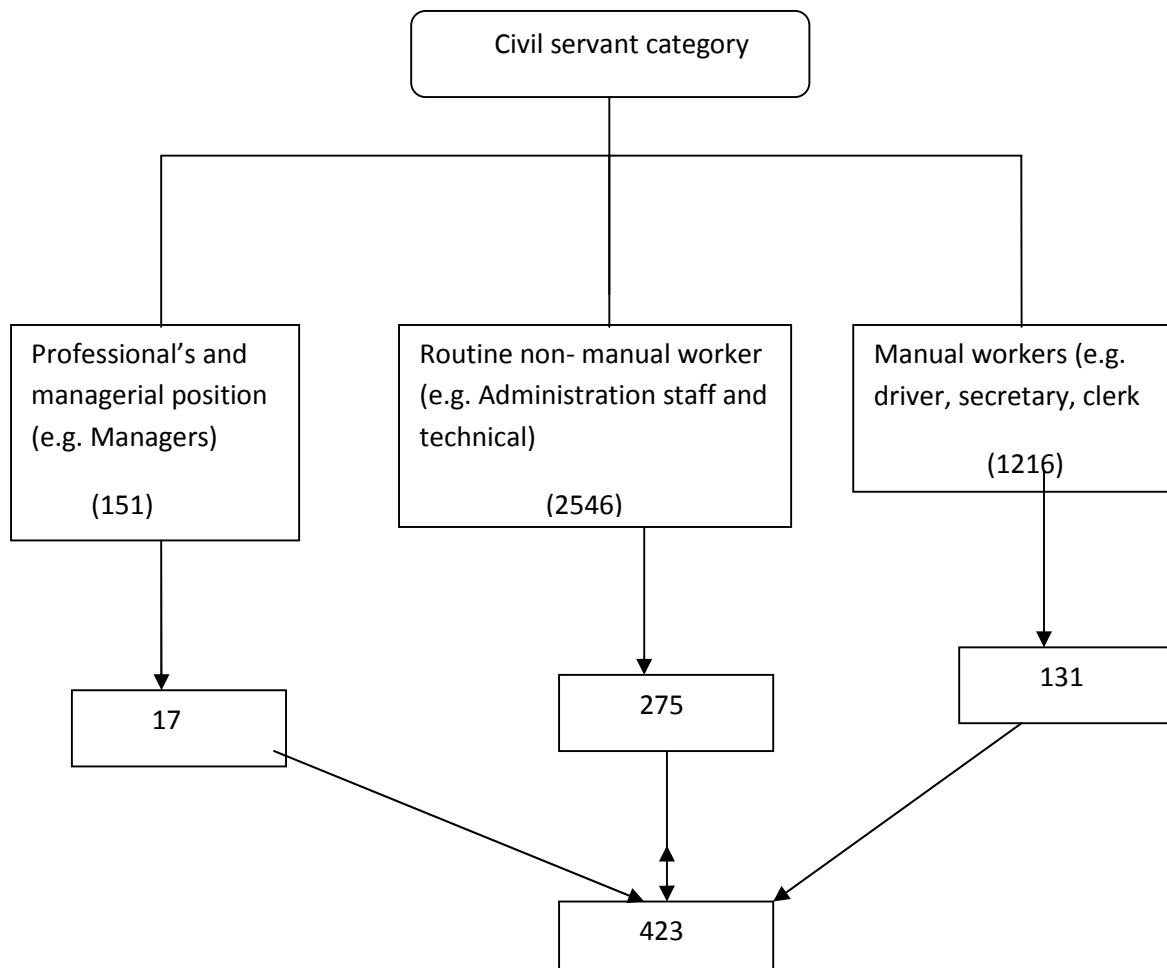


Fig. 2:- schematic presentation of sampling procedure on prevalence of depression and associated factors, Harar, eastern Ethiopia

3.7 Variables of the study

Dependant variable

- Depression

Independent variables

- Demographic characteristics:- Age, Sex, Number of children
- Socio-economic: Marital status, Income, Level education, Religion,
- Psychosocial factor: - job dissatisfaction, stressful life event, job stressors
- Behavioral factors: - Alcohol, khat chewing, Smoking and Exercise

Operational definition

Depression: - servants who were found to have 5 or more symptoms of the PHQ-9 questions in the last 2 weeks were considered as having depressive symptoms. This cut-off was based on the category of DSM-IV criteria.

Civil servant: - Civil Servant means a person employed permanently by government institution.

Presence of chronic diseases: when subjects have at least one or more chronic disease

Current users: when subjects use specified substance currently.

Ever users: when subjects use specified substance even once in their life time.

Physically active: when subjects engaged in moderate activities at least 5 times per week, duration 30 minutes and/or vigorous activities at least 3 times per week duration 20 minutes.

High level of work demands: when subject's score of work demand was greater than or equal to median score.

High level of job security: when subject's score of job security was greater than or equal to the median score.

3.8 Data collection procedures

Data was collected using structured self-administered questionnaire having five parts, the first part containing socio-demographic information. The second part of the questionnaire was a Patient Health Questionnaire (PHQ-9). In this study the (PHQ-9) was used to classify whether depression is present or not. The PHQ originally developed by American psychiatric association. (PHQ) is a new instrument for making criteria-based diagnoses of depressive and other mental

disorders commonly encountered in primary care. The Patient Health Questionnaire is a self-administered tool with 9 (PHQ9) items. The PHQ-9 has the potential of being a dual-purpose instrument that, with the same 9 items, can establish depressive disorder diagnoses as well as grade depressive symptom severity. A meta-analysis showed that a PHQ-9 score 10 had a sensitivity of 88% and a specificity of 88%. The PHQ9 is a screening tool for depression that assesses the frequency of depressed mood and anhedonia over the past 2 weeks, scoring each as 0 ("not at all") to 3 ("nearly every day") (36,37).

PHQ-9 score was divided into the following categories of increasing severity: 0–4, 5–9, 10–14, 15–19, and 20 or greater and represents minimal, mild, moderate, moderately severe and severe depression respectively (36).

The Validity of the PHQ-9 for depression screening was studied in Ethiopia among a total of 926 adults attending outpatient departments in a major referral hospital. They assessed criterion validity and performance characteristics against an independent, blinded, and psychiatrist administered semi-structured Schedules for Clinical Assessment in Neuropsychiatry (SCAN) interview. Overall, the PHQ-9 items showed good internal (Cronbach's $\alpha=0.81$) and test re-test reliability (interclass correlation coefficient=0.92). A factor analysis confirmed a one-factor structure. Receiver Operating Characteristics (ROC) analysis showed that a PHQ-9 threshold score of 10 offered optimal discriminatory power with respect to diagnosis of major depressive disorder (sensitivity=86% and specificity=67%). The PHQ-9 appears to be a reliable and valid instrument that may be used to diagnose major depressive disorders among Ethiopian adults (38).

Third part of the questionnaire was asked about psychosocial work environment or stress factors based on effort/reward imbalance (ERI) and demand/control/support (DCS) models. Both model presented in a Likert-type scale (1–4), ranging between "strongly Disagree to strongly Agree" and Dichotomized at their median. The demand/control and effort/reward imbalance models independently predicted poor self-reported health status. Overall, the proportion of variance in depression/burnout explained by stress factors in different studies varies considerably from approximately 10% to 50 % (27).

Fourth part of the questionnaire was asked about behavioral factors, which comprises of history of substance use in their life time, and current use and history of leisure time physical exercise in the last 7 days. The final part of the questionnaire was asking presence of chronic disease

The data collector was proceeding from organization to organization. They were introducing themselves and were explain the purpose of the study using specific statements in a standard procedure. Consent to participate was obtained from each participant. One supervisor and 3 data collectors was employed and trained for two days about the time of data collection, timely collection and reorganization of the collected data from respective departments and submission on due time. The data was collected by 3 urban health extension professionals after 2 days rigorous training by using training manuals.

3.9 Data quality control

To assure the data quality high emphasis was given in designing data collection instrument especially demographic, substance use and Psychosocial and economic factor parts. Before starting the actual survey, the questionnaire was pre-tested on 40 individuals from one organization/sector which was not been included in the study.

Throughout the course of the data collection, interviewers was supervised at each site, regular meetings was held between the data collectors and the principal investigator together in which problematic issues arising from interviews which was conducted and mistakes found during editing was discussed and decisions was reached. Two more additional visits were made if a respondent were not found in the first visit.

The collected data was reviewed and checked for completeness before data entry; the incomplete data was discarded. Data entry format template was produced and programmed.

3.10 Data processing and analysis

Data was checked, coded and entered to Epi-info version 3.5.4 and was exported to SPSS (Statistical Package for Social science) version 20 for analysis. Data entry was made by the principal investigator. Bivariate analysis was used to

examine association between dependent and independent variables. All variables with $p < 0.2$ in bivariate analysis were inserted in to the multiple logistic regression model to identify factors associated with depression. Significance was obtained at Odds ratio with 95% CI and $p < 0.05$.

4. Ethical consideration

Ethical clearance was obtained from Ethical review board of university of Gondar and in order to obtain permission letter I was contact Harari regional civil service and health bureau. Then civil servants from organization was informed about the purpose of the study, the importance of their participation, withdraw at any time and verbal consent was obtained prior to data collection. The questionnaire was anonymous and self administered to increase confidentiality. Privacy and confidentiality of information given by each respondent was kept properly and names were not recorded. For those who were found with severe depression during the study period was linked to jugol or hiwetfana hospital for further investigation and treatment.

5. Results

5.1 Socio-demographic characteristics

A total of 401 study participants were interviewed, giving a response rate of 95%. About 223(55.6%) were male and majority of the participants were in the age category of 29-39 years old with mean age of 32.6(SD= 8.6, ranges 19-52) followed by age category of 18-28 years old.

With respect to religion, almost half of the participants (49.1%) were Muslims with the orthodox religion accounting for 40.9 % of the participants. Most of the respondents were married 222(55.4%) and regarding education level of the respondents 174(43.4%) were diploma holders, and majority 137 (34.2%) were of Amhara ethnicity.

Among the participant, 153(38.2%) of them had a work experience of less than 5 years, 123(30.7%) between 6-10 years and 54(13.5%) between 11 and 15. When it comes to their monthly income, majority of them 201(50.2%) had monthly income between 500-1499. Further socio-demographic characteristics can be seen on Table 1.

Table1:- Demographic and Socio Economic characteristics of urban civil servants, in Harari Region, eastern Ethiopia, April 2014.

Variable		Frequency	Percent (%)
Sex	Male	221	55.1
	Female	180	44.9
Age	18-28	155	38.7
	29-39	179	44.6
	40-50	53	13.2
	>50	14	3.5
Ethnicity	Harari	122	30.4
	Oromo	120	29.9
	Amhara	137	34.2
	Tigre	10	2.5
	Other	12	3.0

Religion	Muslim	197	49.1
	Orthodox	164	40.9
	Protestant	37	9.2
	Other	3	0.8
Education attained	Elementary	20	5.0
	High school	47	11.7
	Certificate	32	8
	Diploma	174	43.4
	Degree	117	29.2
	Master	11	2.7
Marital status	Single	154	38.4
	Married	222	55.4
	Divorced	16	4
	Widowed	6	1.5
	Separated	3	0.7
Number of child	Have no child	186	46.4
	Having 1 children	72	18.0
	Having ≥ 2 children	143	35.7
Monthly income	<500 Eth birr	39	9.7
	500-1499 Eth birr	201	50.1
	1500-2500 Eth birr	89	22.2
	>2500 Eth birr	72	18

5.2 Lifestyle and clinical conditions of the respondents

Of the total of 401 study subjects 176 (43.9 %) were currently using khat when this study was conducted, and 82 (20.4 %) had practiced khat chewing at least once in their life time. Moreover, 59 (14.7 %) of the respondents were current alcohol drinkers, and 53(13.2%) have used alcohol at least once in their life time. Regarding smoking practices 44 (11%) of the respondents used tobacco products.

Among study participants 44 (11%) had history of leisure time physical exercise in the last seven days and the remaining 357 (89%) had no history of leisure time

physical exercise. Furthermore, 20 (5%) of the respondents reported at least one kind of non communicable chronic illness. For further information you can see Table 2.

Table 2:- Life style and clinical conditions of respondents in Harari region, Eastern Ethiopia, 2014

Variable		Frequency	Percent (%)
Khat users	Current users	176	43.9
	Ever-users	82	20.4
	Never	143	35.7
Alcohol users	Current drinker	59	14.7
	Ever-drinker	53	13.2
	Non drinker	289	72.1
Cigarettes and shisha use	Current smokers	28	7.0
	Ever-smokers	16	4
	Non smokers	357	89.0
Leisure time physical exercise	No	357	89.0
	Yes	44	11
Self reported	No	381	95.0
Presence of chronic illness	Yes	20	5.0

5.3 Prevalence of depression

There were 66 adults with symptoms of depression in the last 2 weeks with over all prevalence of 16.5% (95% CI 13.2-19.7). While 13.2% of the males have depression symptoms, the proportion amongst the females was 19.7%.

The distribution of PHQ9 scores among respondents demonstrate that 335(83.5%) of respondent had score less than 4, 43(10.7%) had score between 5 and 9, 14(3.5%) had score between 10 and 14, 6(1.5%) had score between 15 and 19 and 3(0.7%) had score between 20 and 27.

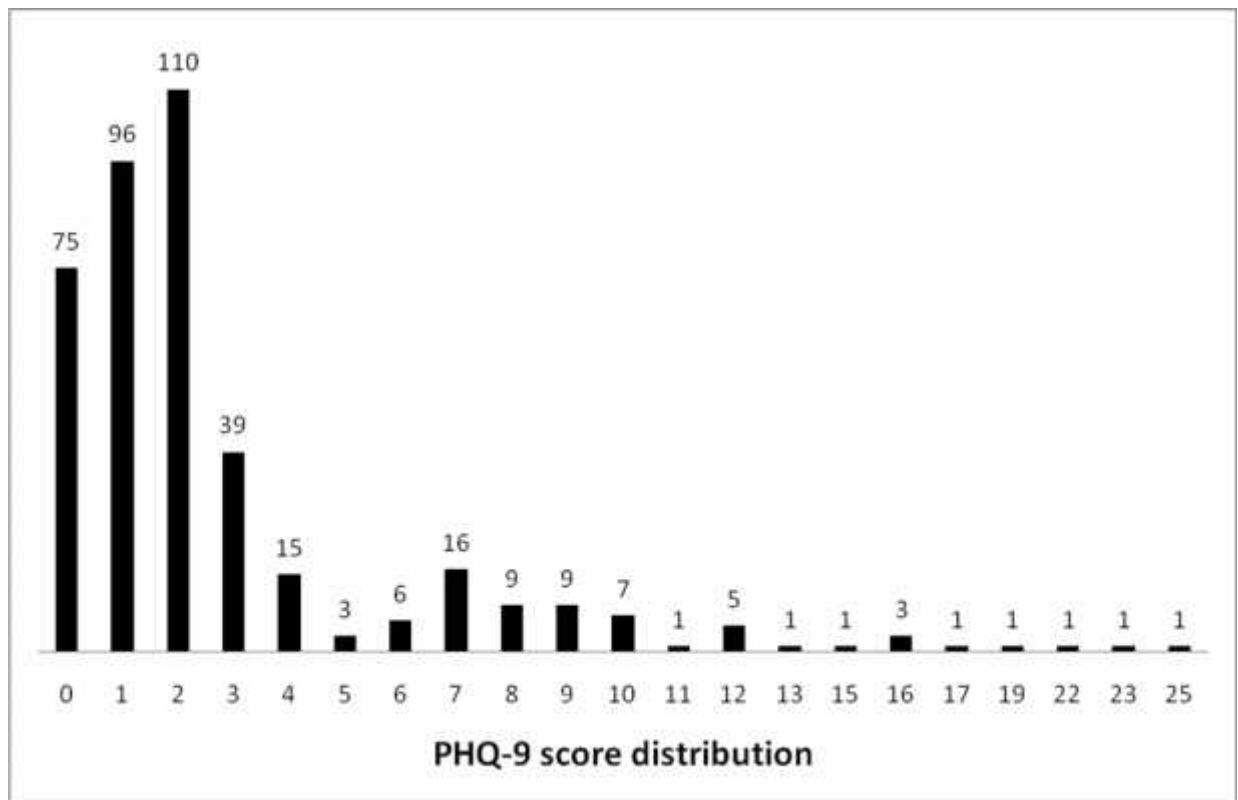


Figure 3: distribution of PHQ-9 scores by the level of depression severity among urban civil servants, in Harari Region, Eastern Ethiopia, 2014.

5.4 Factors associated with depression

5.4.1 Socio-demographic factors

Bivariate analysis showed that there was statistically significant association between depression the socio-demographic factors sex and marital status. The proportion of depression symptoms was higher among women (20%) than men (13.2%). With regard to marital status, a greater number of depressive subjects are found in the group of widowed/divorced/separated respondents (40%), as well as in the single group (16%) and the married group (13.5%).

In the bivariate analysis being wid/sep/div (COR=3.49, 95% CI 1.49–8.14) was found to be risk factors for depression symptoms when compared to being in the single group. After adjusting for all other variables the association of marital status with depression were the most important risk factor observed only for widowed/divorced/separated, where they were 3.3 times more likely to have depression as compared to single with (AOR=3.31, 95% CI 1.2-9.13).

5.4.2 Psycho-social work environment factors

The variables work control, social support, job security, relationship, and job satisfaction were significantly associated with depressive symptoms in the bivariate analysis. There was also statistically significant association between depression and work control, job security and job satisfaction in the multiple logistic regression. Among the respondents those who have low work control were 7.0 times more likely to have depressive symptoms than those who have high work control (AOR=7.01 CI 95% 3.49,14.30) (**Table 3**).

Those who have perceived low job security were 2.6 times more likely to develop depressive symptoms as compared to those who have perceived high job security (AOR=2.6695% CI(1.44-5.84)

The risk of having depressive symptoms among individuals who rate dissatisfied on the single item “self reported job satisfaction index” were 3.5 times more likely to develop depression (AOR=3.55 CI 95% 1.85, 6.81) when we compared with individuals who rate satisfied.

There was no statistically significant association between depression and the factors demand and promotion carrier in both bivariate and multivariate analysis.

5.4.3 Life style factors and Non communicable chronic diseases

The study showed that the proportion of depressive symptom is higher in the group of current khat chewer (18.2%) when compared with their respective groups (15.1%). This difference is not statically significant in the bivariate and multivariate analysis. The proportion of depressive disorder was higher in those who have chronic diseases (25%) when compared to those who have no chronic diseases (16%). However this difference was not statically significant at 95%CI.

Table 3:-Bi-variate and Multivariate logistic regression analysis of factors Associated with depression among urban civil servants in Harari regional state, eastern Ethiopia 2014

	<u>Depression</u>			
variables	YES	NO	COR (95% CI)	AOR (95%CI)
Sex				
Female	38	144	1.80(1.05,3.07)*	
Male	28	191	1	
Marital status				
Single	25	131	1	1
Married	29	186	0.81(0.45,1.45)	0.99(0.51,1.90)
Wid/Div/sep	12	18	3.49(1.49,8.14)*	3.31(1.20-9.13)*
Demand				
low	40	163	1.62(0.94-2.78)	
High	26	172	1	
Control				
High	37	311	1	1
Low	29	24	10.15(5.35,19.24)**	7.07(3.49,14.70)**
Social support				
High	37	281	1	
Low	29	54	4.07(2.31,7.18)**	
Job security				
High	10	118	1	1
Low	56	217	3.04(1.49,6.18)*	2.66(1.21-5.84)
Relationship				
High	22	205	1	
Low	44	130	3.15(1.80,5.50)**	
Promotion carrier				
High	16	117	1	
Low	50	218	1.67(0.91,3.07)	
Job satisfaction				
Satisfied	18)	220	1	1
Dissatisfied	48)	115)	5.10(2.23,9.17)**	3.55(1.85,6.81)**

Note: 1.00=Reference **=p<0.001 * =p<0.05
Wid/div/sep: widow/divorced/separated

6. Discussion

In this study, the prevalence of depression was 16.5% which was higher than other study conduct in Ethiopia which was 2.2% in general population (22), 4.4% among women (21) and 9.1% in the national health survey (9). The possible explanation for this higher prevalence of depression symptoms in our study might be due to the methodological issues and the measurement tool used by other studies conducted in Ethiopia use the composite international diagnostic interview (CIDI).

Other studies in Ethiopia also showed higher prevalence of depression where 26% subjects were found to have major depression in a follow up cohort study (8). However, direct comparison with other studies was difficult due to the varying study subject. But the present finding of prevalence of depression symptoms was within the range of the prevalence of depression among economically active group where it was reported to be no more than 15% (17). However, prevalence of depression was found to be inconsistent with the prevalence of study conducted among South African doctors 27% (20) and Nepal civil servants which was 25.5% (16). The inconsistency for this prevalence was the measurement tool differences where the South African doctors were assessed for depression by beck depression inventory (BDI) and for the Nepal study zung depression scale was used.

Concerning the significantly higher odds ratio for low control causing depression was consistent with other findings (28,30,29) which reported significantly higher odds ratio for those having depression among employees. The finding has been confirmed by the results from Japanese, Lithuania and Danish workers. The study conducted amongst the Japanese employees showed that having low control had significantly higher odds ratio AOR 4.71(95%CI 1.61-13.72). Although the study done in Lithuania among female workers who have low control found that there was significantly higher odds ratio 10.81 (95% CI: 2.13-54.71) .The consistence of a relationship between low controls associated with depression by high odd ratio can be explained by methodological similarity.

Low job security strongly is also associated with depression, which is in line with studies conducted among Korean and Danish workers (25, 30). This could be explaining by the job stress measurement tool similarity. This interaction increase risk of depression among workers who work in stressful conditions.

Similar to some other studies from Ethiopia and Nigeria the current study has shown the significantly higher risk of depressive symptoms in widowed/separated/divorced subjects (1, 9, 21, 22). The finding implies that unstable marital relationship and the loss of partner increases the risk of having depression symptoms. Moreover, widowed subjects might have stress when one loses the beloved one, according to stress theory.

Another important predictor variable for depression symptoms in our study is job satisfaction where those dissatisfied in their job were likely to have depression symptoms. This is inconsistent with other findings (24, 25, 27) that showed no association between job satisfaction and depression episodes. This may be due to the difference in socioeconomic status; however, further investigation recommended.

7. Strength and Limitation of the study

Use of PHQ-9 instrument which is a worldwide accepted, standardized well adopted in our country and well valid instrument to measure depression, is the major strength of this study.

The possible limitation of this study was the fact related to the cross-sectional design used, which simultaneously evaluate variables of the effect of interest and their associated factors, should be emphasized. Thus, it is not possible to identify whether depression influenced the associated factors or vice-versa.

8. Conclusion

The prevalence of depressive symptoms among urban civil servant was high. When compared to community based study.

The variables sep/div/wid, low work control, perceived low job security and job satisfaction were found to be significantly associated with depressive symptoms.

9.Recommendation

On the basis of this study the following recommendations are forwarded

To federal and regional ministry of civil services:

- ◆ Should take organizational change that improve employees skill discretion and decision authority
- ◆ Develop system that improve job satisfaction
- ◆ Should give periodical training on social skill and coping with stress
- ◆ Should take measures in structural changes mainly job redesign and work reorganization
- ◆ Should give education scholarships and opportunities
- ◆ Should initiate workers to learn additional professions and vocational

To federal and regional ministry of social and labour affairs:

- ◆ Prepare and distribute leaflet on how to improve coping with stress.
- ◆ There is also a need to establish periodical screening program

To researchers:

- ◆ Similar institution based studies which is longitudinal type and at specific target groups is beneficial to establish casual pathway.

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Annex 1 Information Sheet and Consent Form

Title of the Research Project: Prevalence and factors affecting depression among urban civil servant in Harari regional state, Ethiopia.

Name of Investigator: welid Abdi

Name of the Organization: University of Gondar College of Medicine and Health Sciences, Institute of Public Health.

Name of the Sponsor: University of Gondar

Information Sheet and Consent Form prepared for harar urban civil servant who is going to participate in the research project entitled as “**Prevalence and factors affecting depression among urban civil servant, Harar, Ethiopia. 2014**”

Introduction:

This information sheet and consent form is prepared with the aim of explaining the research project that you are asked to join by the group of research team. The main aim of this research project is to assess the “**Prevalence and factors affecting depression among urban civil servant in harar, Ethiopia. 2014**” This research team includes one principal investigator, three health extension data collectors, two supervisors who are BSc. Holders in health officer and two advisors from University of Gondar.

Purpose of the Research Project:

In Ethiopia, In view of the growing psychosocial hazards due to rapid globalization in this countries but its health consequences have not given great concern due to lack of researches attempt on this specific area the most common causes of depression is not well known especially for civil servant. This study will play an important role by assessing and identifying the level and associated factors of depression In order to protect and promote the health and safety of urban civil servant. Doing so is critical in order to design appropriate strategies to improve the situation based on the findings.

Procedure:

In order to measure the level and associated factors of depression among urban civil servant of harari regional state 2014; we invite you to take part in this project. If you are willing to participate in this project, you need to understand and give your consent. Then, you are requested to give your response to the data collectors.

For this questionnaire based study, study subjects are urban civil servants who are selected by simple random sampling. All the response given by participants was kept confidential by using key and locked system like computer pass word whereby no one was having an access to it.

Risk and /or Discomfort:

By participating in this research project you may feel that it has some discomfort especially wasting your time (30 minutes) but this may not be too much as you are one of the member of the urban civil servant. So, your response will help as an important input to show level and associated factors of work related depression which will be an important evidence to tackle the problem and to improve the health and safety of civil servant. There is no risk in participating in this research project.

Benefits:

If you are participating in this research project, there may not be direct benefit to you. But, your participation is likely to help us to measure level of work related depression among urban civil servant of Harari regional state which helps to develop better intervention to improve health and safety condition.

Incentives/Payments for Participating:

You will not be provided any incentives or payment to take part in this project.

Confidentiality:

The information collected from this research project will be kept confidential and information about you that will be collected by this study will be stored in a file, without your name. In addition, it will not be revealed to anyone except the

investigator and it will be kept in key and locked system with computer password.

Right to Refusal or Withdraw:

You have a full right to refuse from participating in this research (you have a right not to respond to some or all the questions). You have also the full right to withdraw from this study at any time you wish, without losing any benefits from this project.

Person to contact:

This research project will be reviewed and approved by the ethical committee of the University of Gondar. If you want to know more information, you can contact the committee through the address below. If you have any question you can contact any of the following individuals (Investigator and Advisors) and you may ask at any time you want.

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Consent form

Good morning / good afternoon

My name is -----, I work for -----

You may have been already informed that a survey on depression and associated factors in Harar town will be done in this month in Harari regional state.

This study has been approved by university of Gonder ethical committee. Only anonymous data will be analyzed. The information which is collected in the research will be strongly kept confidentially. Which will not have your name on it but the code number will assign to it.

I request you to take part in my study. Your participation is voluntary. If you are willing to participate sign the agreement form. It is possible to stop the interview at contribution to generate valid information that will be used for intervention design. You have been randomly selected to participate in this study.

Signature _____

date _____

Thank you!!

Annex II Questionnaire

I. Socio – demographic questions

S.no	Questions	
290	Sex	Male_____, female_____
291	Age	(in year)_____
292	Ethnicity	1. Harari 2. Oromo 3. Amhara 4. Tigre 5. Somali 6. Others; specify.....
293	Religion	1. Muslim 2. Orthodox 3. Protestant 4. Catholic 5. Others; specify-----
294	What is your highest education attained?	1. Primary education 2. Secondary education 3. Junior certificate 4. Diploma 5. Bsc degree 6. Master's degree 7. Other specify
295	Your Occupation	-----
296	Your work experience in year	1. 0-5 years 2. 6-10years 3. 11-15years 4. 16-20years 5. Greater 20 years
297	Marital status	1. Single 2. Married 3. Divorced 4. Widowed 5. Separated
298	Have you a child	1. Yes 2. No

299	If “yes” the number of children	_____
300	Monthly income	_____

Section II: prevalence of depression

s.n	Over the <i>last 2 weeks</i> , how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
301	Little interest or pleasure in doing things	0	1	2	3
302	Feeling down, depressed, or hopeless	0	1	2	3
303	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
304	Feeling tired or having little energy	0	1	2	3
305	Poor appetite or overeating	0	1	2	3
306	Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
307	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
308	Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3

309	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3
	Add from 300 to 309				

Part three III assessment of psychosocial work environment

This part will ask you about your psychosocial work environment and will answer by selecting from strongly disagree to strongly agree.

		Strongly disagree	disagree	agree	strongly agree
	Demand (10)				
310	Does your job require you to work very fast?	1	2	3	4
311	Does your job require you to work very hard?	1	2	3	4
312	Does your job require a too great work effort?	1	2	3	4
313	Do you have sufficient time for all your work tasks? (Reverse coding)	1	2	3	4
	Control (15)				
314	Do you have the opportunity to learn new things in your work?	1	2	3	4
315	Does your job require doing the same tasks over and over again? (Reverse coding)	1	2	3	4
316	Do you have the possibility to decide for yourself how to carry out your work?	1	2	3	4
317	Do you have the possibility to decide for yourself what should	1	2	3	4

	be done in your work?				
318	Does your job require you to take the initiative?	1	2	3	4
319	Does your work require skills	1	2	3	4
	Social support (10)				
320	There is a quiet and pleasant atmosphere at my place of work.	1	2	3	4
321	There is good collegiality at work.	1	2	3	4
322	I get along well with my supervisors.	1	2	3	4
323	I get along well with my co-workers.	1	2	3	4
	Job security (5)				
324	My employment security is poor. Reverse coding	1	2	3	4
325	I have experienced or I expect to experience an undesirable change in my work situation. Reverse coding	1	2	3	4
	Promotion career (5)				
326	My current occupational position adequately reflects my education and training	1	2	3	4
327	Considering all my efforts and achievements, my salary / income is adequate.	1	2	3	4
	Relationships (8)				
328	Dose subject to personal harassment in the form of unkind words or behaviour. Reverse coding	1	2	3	4
329	Dose subject to bullying at work.	1	2		

	Reverse coding			3	4
330	Relationships at work are strained. Reverse coding	1	2	3	4
		Strongly dissatisfied	Dissatisfied	Satisfied	Strongly satisfied
331	Overall how do you rate your Job satisfactions	1	2	3	4

Section IV. Behavioural factors

I. Substance use

s.n	Question	
332	Have you ever used khat in your life?	1. Yes ----- 2. No -----
333	Do you chew khat currently?	1. Yes ----- 2. No -----
334	Have you ever drink alcohol??	1. Yes ----- 2. No -----
335	Do you drink currently?	1. yes----- 2. No -----
336	Have you ever used tobacco product such as cigarette, wrapped tobacco and shisha	1. yes----- 2. No -----
337	Do you smoke now?	1. yes----- 2. No -----

II. Physical exercise

338. Have you done physical exercise (such as walking, jogging, running, team sports like football, volleyball etc) in your leisure time in the last 7 days (in last week)

339. If yes, what type of exercise and for how many minutes?

	Activity 1	minutes	Activity 2	Minutes	Activity 3	Minutes
Day 1						
Day 2						
Day 3						
Day 4						
Day 5						
Day 6						
Day 7						

V. chronic diseases

340. Do you have chronic diseases like stroke, diabetes, hypertension etc?

Yes _____ 2. No _____

341. If yes specify _____

Annex III Amharic version

የመረጃና የፍቃድ ጥያቄ የመረጃ ቅጽ

የመረጃ ቅጽ

መግቢያ፡-ይህ የመረጃ ቅጽ የተዘጋጀው በሐረር ክልል በሐረር ከተማ ውስጥ የሚካሄደው የድብርት መታወክ ችግሮችን ለመለየት በሚደረገው ጥናት የተዘጋጀ መጠይቅ ነው ስለሆነም በዚህ ጥናት ውስጥ ሚሳተፉት ሥስራት የስልጠና የከተማ ጤና ኤክስፔሽን ባለሙያዎች አንድ አስተባባሪ አንድ ሱፐርቫይዘር ሁለት የጎንደር ዩኒቨርሲቲ አማካሪዎች እና ዋና አጥኝው ናቸው፡፡ የጥናቱ መሰረታዊ አላማ በሐረር ከተማ የመንግስት መስሪያቤት ሰራተኞች የሆኑት ሰዎችን የድብርት መታወክ ብዛት ና ተዛማጅ መንስኤውን ለመለየት ነው፡፡

በአሁኑ ጊዜ በሳይኮሶሻል ችግሮች እያደጉ መጠዋል ነገርግን በጤና የሚያስከትሉት ንገሮች ንላይ ምንም አትክሮት አልተሰጠውም በተለይለ መንግስት ሰራተኞች ስለሆነ ምችግሩን ለመከላከል በርካታ ድብርት አምጭ መንስኤዎችን የሚገልፅ መረጃዎች አስፈላጊ በመሆኑ በዚህ ጥናት በተገለፀው አካባቢ ካሁን በፊት ጥናት ያልተደረገበት በመሆኑ ይህ ጥናት ለአካባቢው የመንግስት ሰራተኞች የአምሮ ጤናን እንዲሻሻል እና ለወደፊቱም የተለያዩ ፕሮግራሞች ለመቅረጽ ይረዳል፡፡

የናሙና አመራረጥ መንገድ ፡ጥናቱ ውስጥ የመካተቱት ከተማ ውስጥ የሚሰሩ መንግስት ሰራተኞች በነሲብ ተመረጡ ናቸው፡፡

ምቹ ያልሆኑ ሁኔታዎች፡ በዚህ ጥናት ውስጥ በመሳተፈዎ በተለያዩ አልያም ባለታወቀ ምክንያት ምቹ ያልሆኑ ሁኔታዎች ሊያጋጥሙ ይችላሉ ይሁን እንጂ ጥናቱ ከሚኖረው ጥቅም አንጻር ሊወዳደር አይችልም፡፡

ጥቅም፡

በዚህ ጥናት በቀጥታ ተጠቃሚ ላይሆኑ ይችላሉ ይሁን እንጂ ችግሩን በመቅረፍ ሂደት ውስጥ ቀጥተኛ ተሳታፊነት ይኖራቸዋል፡፡

ጉርሻ፡ በዚህ ጥናት ውስጥ በመሳተፈዎ የሚያገኙት ጉርሻ አይኖርም፡፡

ምሲጥር መጠበቅ፡ ሚስብሰብት መረጃዎች ሚስጥራቸው የተጠበቀ መሆኑን አረጋግጣለው ለዚህም ሲባል በስሞዎ ሳይሆን በሚስጥር ቁጥሮዎ ይወከላሉ በመጤቱ ሂደት ውስጥ ለማቆም ከፈለጉ በማንኛውም ሰዕት በቀላሉ ሊያቆም ይችላሉ ይሁን እንጂ የርሶ ሀቀኛ

ተሳታፊ መሆን የጥናቱ ቅርፅ በትክክለኛ ወይም ዋጋ ባለው መረጃ የተመሰረተ ለማድረግ ከፍተኛ አስተዋፅኦ ማድረግ አለበዎት፡፡

አድራሻ፡ ስለ ጥናቱ መጠየቅ የሚፈልጉት ነገር ከላ የሚከተሉትን አድራሻዎችን መጠቀም ይችላሉ

1. አቶ ወሊድ አብዱ - ዋና አጥኚ
ስ.ቁጥር ፡ ሞባይል 0911718512
ኢ.ሜል፡welidabdi@yahoo.com
2. አቶ ተላክ አዛለ - አማካሪ
ስ.ቁጥር ፡ ሞባይል 0918771951
ኢ.ሜል፡telakea@yahoo.com
3. ታደሰ አወቀ - አማካሪ
ስ.ቁጥር ፡ ሞባይል 0910173308
ኢ.ሜል፡ tawoke7@gmail.com

Annex IV Amharic version questionnaire

ክፍል አንድ፡ የግል እና የማህበራዊ ሁኔታን በተመለከተ የክረስ መጠይቅ

	ጥያቄያዎች	ምርጫዎች
290	ጾታ	1. ወንድ 2. ሴት
291	እድሜ	-----
292	ብሔር	1. ሀረሪ 2. ኦሮሞ 3. አማራ 4. ትግሬ 5. ሰማሌ 6. ሌሎች (ይጠቀሱ)-----
293	ሃይማኖት	1. ሙስሊም 2. ኦርቶዶክስ 3. ፕሮቴስታንት 4. ካቶሊክ 5. ሌሎች ይጠቀሱ-----
294	ከፍተኛ የትምህርት ደረጃ/ሽ	1. ኤላመንተሪ 2. ሃይስኩል 3. ሰርተፍኬት 4. ዲፕሎማ 5. ዲግሪ 6. ማስተር 7. ሌሎች ይጠቀሱ-----
295	የስራ ድርሻህ/ሺ የስራ ስም	-----
296	የስራ ልምድ (በዓመት)	1. 0-5 ዓመት 2. 6-10 ዓመት 3. 11-15 ዓመት 4. 16-19 ዓመት 5. 20 እና ከዚያ በላይ
297	የጋብቻ ሁኔታ	1. ያላገባ/ች

		2. ያገባ/ች 3. አግብቶባል/ች 4. በሞት የተለየ/ች 5. ተለያይተው የሚኖሩ
298	ልጅ አለህ/ሽ	1. አዎ 2. የለም
299	አዎ ከሆነ ስንት ልጆች	-----
300	የገቢዎ መጠን በወር	-----

ከፍል ሁለት ፡-ከዚህ ባታች የሚጠይቁት ባለፉት ሁለት ሳምንታት ከነዚህ ከምዘረዝራቸው ችግሮች ውስጥ የትኞቹ እንደነበሩዎት ወይም በየትኞቹ ተቸግረው እንደነበር ይምረጡ።

ማስታወሻ፤ አልፎ አልፎ ብቻ (2-6 ቀናት)፣ በዛላ ለጊዜ (7-11 ቀናት)፣ ከሞላ ጎደል በየቀኑ (12-14 ቀናት) መሆኑን ግለጹ።

ባለፉት ሁለት ሳምንታት ከነዚህ ከምዘረዝራቸው ችግሮች ውስጥ የትኞቹ እንደነበሩዎት ወይም በየትኞቹ ተቸግረው እንደነበር ይጥቀሱ።

301	የዕለት ተዕለት ሥራዎን ለማከናወን ያለዎት ፍላጎትዎ በጣም ቀንሶ ነበር?	1. አዎ 0. የለም	
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ	
302	የመከፋት፣ የመደበት ወይም ተስፋ የመቁረጥ ስሜት ይሰማዎት ነበር?	1. አዎ 0. የለም	
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ	
303.1	እንቅልፍ አልወሰድ ብሎዎት ወይም በደንብ መተኛት አቅቶዎት ነበር?	1. አዎ 0. የለም	
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ	

		3.ከሞላ ጎደል በየቀኑ
303.2	እንቅልፍ ይበዛብዎት ነበር?	1. አዎ 0. የለም
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ
304	የድካም ወይም የአቅም ማነስ ስሜት ይሰማዎት ነበር?	1. አዎ 0. የለም
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ
305.1	የምግብ ፍላጎትዎ ቀንሶ ነበር?	1. አዎ 0. የለም
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ
305.2	የምግብ ፍላጎትዎ ከተለመደው በላይ ጨምሮ ነበር?	1. አዎ 0. የለም
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ
306	ራስዎን የመጥላት ወይም ዋጋ የለኝም ቤተሰቤንም አሳዝኛለሁ የሚል ስሜት ተሰምቶዎት ነበር?	1. አዎ 0. የለም
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ
307	በሚሠሩት ሥራ ላይ ሀሳብዎን መስብስብ ወይም ትኩረት መስጠት ለምሳሌ ከሰዎች ጋር ሲጫወቱ ትኩረት ሰጥቶ ማዳመጥ ይቸግሮት ነበር?	1. አዎ 0. የለም
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ

		2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ	
308.1	ለሌሎች ሰዎች እስከሚታወቅ ድረስ በእንቅስቃሴዎ ወይም በንግግርዎ በጣም ቀስ ብለው ነበር?	1. አዎ 0. የለም	
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ	
308.2	ለሌሎች ሰዎች እስከ ሚታወቅ ድረስ መረጋጋት አቅቶዎት፣ አንድቦታ አርፎ መቀመጥ ወይም መቆም አቅቶዎት ነበር?	1. አዎ 0. የለም	
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ	
309	ከምኖር ብሞት ይሻለኛል ብለው አስበው ወይም ራስዎን በሆነ መንገድ ሊጎዱ አስበው ነበር?	1. አዎ 0. የለም	
	መልሱ አዎ ከሆነ ለምን ያህል ጊዜ?	1. አልፎ አልፎ ብቻ 2. በዛ ላለ ጊዜ 3. ከሞላ ጎደል በየቀኑ	

ክፍል 3፡የሥራቦታመሃበራዊእናስነአምሮዊ (ሳይኮሶሻል) በተመለከተ

	ጥያቄዎች	ምርጫ			
		በጣምአልስማማም	አልስማማም	እስማማለሁ	በጣምእስማማለሁ
	ጫና				
310	ስራህ በፍጥነት እንድትሰራ ያደርገህልሃል/ሻል	1	2	3	4
311	ስራህ/ ሽጠንክረህ ሽእንድትሰራ ሪይፈልገል (ያደርግሃል)	1	2	3	4
312	ስራህሽ መስዋትን እንድትከፍል ይይገፈልጋል	1	2	3	4
313	ስራህንሽን ለማከናወን በቂጊዜ ታገኛለህ	1	2	3	4
	መቆጣጠር				
314	ስራህሽ አዲስ ነገር እንድትማር ሪያደርግሃል/ሻል	1	2	3	4
315	ስራህሽ ፡ሁሉም አንድ አይነት ነገር ደጋግመህ/ሽ እንድትሰራ ሪያደርግሃል/ሻል	1	2	3	4
316	ስራህንሽን እንዴት መስራት እንዳለብህ/ሽ የመወሰን አቅምአለህ/ሽ	1	2	3	4
317	ምን መስራት እንዳለብህ /ሽ መወሰን አቅምአለህ/ሺ	1	2	3	4
318	ስራህ አዲስ ነገሮችን እንድታቅድ ያነሳሳሃል/ሻል	1	2	3	4
319	ስራህ/ሽ ብልህትን ይፈልጋል	1	2	3	4
	ድጋፍ				
320	የስራህ/ሺ ቦታ ስላም እና ማራኪ ነው	1	2	3	4
321	ጥሩ የሆነ የስራ ድርሻ ክፍፍል አለ	1	2	3	4
322	መልካም የሆነ የስራ ሃላፊዎች ድጋፍ ታገኛለህ/ች	1	2	3	4

323	መልካም የሆነ የስራ ባልደረቦቹ ድጋፍ አገኛለሁ	1	2	3	4
	የስራደህንነት				
324	የስራህ/ሽ ሙያ ተፈላጊነቱ ትንሽ ነው	1	2	3	4
325	በስራ ቅጥርህ ላይ ያልተጠበቀ ለውጥ አለ ወይም ሊኖር ይችላል ብለህ ታስባለህ/ታስቢያልሽ	1	2	3	4
	እድገት				
326	የትምህርት እና የስልጠና ደረጃህ/ሽ በጥሩ ሁኔታ የስራህ ደረጃህን/ሽ ይገልፀዋል	1	2	3	4
327	የስራህ/ሽ ጥረትህ እና ስኬትህ ለሚከፍልህ ደመወዝ ተመጣጣኝ ነው	1	2	3	4
	ግንኙነት				
328	በስራህ ቦታህ/ሺ አላስፈላጊ በሆነ ቃል ባህሪ ማንነትህ/ሺን በሚነካ ሁኔታ (ለሚሳሌበቅንቅበብሄር) ያጋልጦሃል	1	2	3	4
329	በስራህ ቦታህ/ሺ አታናትህን/ሺን ዝቅቦ ሚያዳረግ ቃላቶች ያጋልጠህል	1	2	3	4
330	በስራህ ቦታህ/ሺ የስራ ግንኙነት አስጨናቂ የሆነ ነው	1	2	3	4
		በታጣምደስ ተኛ አይዳለሁም	ደስተኛ አይዳለሁም	ደስተኛ ነኝ	በታጣም ደስተኛ ነኝ
331	ባጠቃላይ የስራ ቦታ ደስተኝነትህን እንዴት ትገልጸዋለህ/ሽ				

ክፍል፡-አራት የአኗኗር ሁኔታ ና የግል ልማድ

ቁጥር	ጥያቄ	መልስ (አማራጮች)
332	ጫት ቅመው ያውቃሉ	1.አዎ 2. የለም
333	አሁንስ ይቅማሉ	1.አዎ 2. የለም
334	ያልኮል መተጥ (ለምሳሌቢራ፣ አረቂየመሳሰሉት) ጠጥተው ያውቃሉ	1.አዎ 2. የለም
335	አሁንስ ይጠጣሉ	1.አዎ 2. የለም
336	ትቦሆ፣ሸሻ እና የመሳሰሉትን አጭሰው ባፍንጫዎ ተጠቅመው ወይም በአፍዎ ይዘው ያውቃሉ	1.አዎ 2. የለም
337	አሁንስ ያጨሳሉ	1.አዎ 2. የለም

338. የአካል ብቃት እንቅስቃሴ በተመለከተ ባለፉት ሰባት ቀናት በትርፍ ሰአተዎ የአካል ብቃት እንቅስቃሴ (ለምሳሌ ቀላል እርምጃዎ ሩጫ፡ ውሃ ዋና፣እግር ኳስ፣መረብኳ ስየመሳሰሉት) ሰርተው ያውቃሉ።

1.አዎ 2. የለም

339.አዎ ከሆነ መልስዎ ምን ዓይነት የአካል ብቃት እንቅስቃሴ እና ለምን ያህል ደቂቃ

	እንቅስቃሴ 1	ደቂቃ	እንቅስቃሴ 2	ደቂቃ	እንቅስቃሴ 3	ደቂቃ
ቀን 1						
ቀን 2						
ቀን 3						
ቀን 4						
ቀን 5						
ቀን 6						
ቀን 7						

ክፍል አምስት፡የቆየ በሽታን በተመለከተ

340.ስር የሰደደ ወይም የቆየ የጤና መታወክ አለቦዎት (ለመሳሌ፡- የስኳርበሽታ፣የደም ግፊት የመሳሰሉት)

1. አዎ

2. የለም

341. አዎ ከሆነ መልስዎ ስሙን ይጥቀሱ -----

Declaration

I, the undersigned, senior MPH student declare that this thesis is my original work in the partial fulfillment of the requirement for the degree of master of public health.

Name: _____

Signature _____

Place of submission;- institute of public health, college of medicine and health science, university of Gonder.

Date of submission: _____

This thesis work has been submitted for examination with our approval as university advisor(s)

Advisors

Name

signature

Assurance of investigator

The undersigned agrees to accept responsibility for the scientific, ethical and technical conduct of the research project and provision of required progress reports as per terms and condition of the research and publications office of the University of Gonder.

Name of student: _____

Date _____ signature _____

Approval of the advisor (s)

Advisor

Name	signature	date
_____	_____	_____
_____	_____	_____